



Annual Drinking Water Quality Report March 2013

What is an Annual Report?

The Village of Cottage Grove's Water Utility is pleased to present to you, its 2012 Annual Drinking Water Quality Report. This annual report is prepared to inform all of its customers about the drinking water quality supplied from its three wells (from the Cambrian Sandstone Aquifer) over the past year.

The primary goal of the Water Utility is to provide its customers with a safe and dependable drinking water supply. To ensure that water quality exceeds the highest State of Wisconsin and Federal ground water quality standards, the Water Utility is continually improving upon its water treatment processes and quality assurance and control sampling programs. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, are more than one year old. This is in addition to maintaining our well head protection plan that is designed to minimize the potential that our groundwater will become contaminated. A copy of the Well Head Protection Plan can be obtained from the Public Works Department.

The drinking water supplied by the Cottage Grove Water Utility over the past year has *met or surpassed* all State of Wisconsin and Federal drinking water quality standards. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791. If you have any questions about this report or concerning your Water Utility, please contact the Cottage Grove Water Utility at (608) 839-5813 or at the address listed above. If you want to learn more about the Water Utility you can attend our meetings which are usually held on the second Wednesday of each month at 5:00 P.M., at the Public Works Department, 225 Bonnie Road. The Water Utility Commissioners are: Christopher Dyer (Chairman), Jim Foley, David Kerznar, Ed Lemay and Charlie Rogers.

If you would like to receive this report in a different language or request a translated copy please contact the Cottage Grove Water Utility at (608)-839-5813 for assistance. Para información en español, telefonea el departamento de Cottage Grove Water Utility a 608- 839-5813.

Water Quality Explanation, Health and Educational Information

As water travels over land and through soil underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances that can eventually contaminate drinking water. All drinking water, *including bottled drinking water*, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's safe drinking water hotline at 1-800-426-4791.

Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS, or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline at 1-800-426-4791.

Source(s) of Water

Source id	Source	Depth (in feet)	Status
2	Groundwater	550	Active
3	Groundwater	530	Active
4	Groundwater	675	Active

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also, come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

The Cottage Grove Water Utility routinely monitors for contaminants in its drinking water according to State of Wisconsin and Federal mandates. The results for this past years monitoring program are presented on the following pages. Following is a list of definitions that describe the results.

- **Non-Detects (ND)** - laboratory analysis indicates that there are no contaminants present.
- **Parts per million (ppm) or milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Picocuries per liter (pCi/l)** - Picocuries per liter is a measure of the radioactivity in water.
- **Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Total Coliform Rule (TCR)** - The testing of bacteria in the water.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Contaminant Level - (MCL)** is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal - (MCLG)** is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **MFL** - million fibers per liter.
- **Maximum Residual Disinfectant Level - (MRDL)** is the level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal - (MRDLG)** is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Millirems per year (mrem/year)** - is a measure of radiation absorbed by the body.
- **NTU** - Nephelometric Turbidity Units.
- **Parts per trillion (ppt)** - or nanograms per liter.
- **Parts per quadrillion (ppq)** - or picograms per liter.

Nitrate Facts

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

We have learned through our monitoring and testing program that some contaminants have been detected in *our drinking water but are well within both State of Wisconsin and Federal limits.*

Number of Contaminants Required to be Tested

This table displays the number of contaminants that were required to be tested in the last five years. The Consumer Confidence Report (CCR) may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	# of Contaminants
Disinfection Byproducts	2
Inorganic Contaminants	16
Microbiological Contaminants	1
Radioactive Contaminants	4
Synthetic Organic Contaminants including Pesticides and Herbicides	23
Unregulated Contaminants	4
Volatile Organic Contaminants	20

Unregulated Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
BROMODICHLOROMETHANE (ppb)	n/a	n/a	1.30	1.30-1.30	07/08/2010	NO	n/a
BROMOFORM (ppb)	n/a	n/a	.34	.34-.34	07/08/2010	NO	n/a
CHLOROFORM (ppb)	n/a	n/a	2.90	2.90-2.90	07/08/2010	NO	n/a
DIBROMOCHLOROMETHANE (ppb)	n/a	n/a	.70	.70-.70	07/08/2010	NO	n/a

Disinfection Byproducts

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
TTHM (ppb)	80	0	5.2	5.2-5.2	07/08/2010	NO	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
BARIUM (ppm)	2	2	.012	.007-.012	2/28/2011	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	.207	0 of 20 results were above the action level	7/19/2011	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	.1	.1 - .1	2/28/2011	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	8.60	0 of 20 results were above the action level	7/19/2011	NO	Corrosion of household plumbing systems; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	3.50	3.50 - 3.50	2/28/2011	NO	n/a

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R&U (pCi/L)	15	0	3.5	3.5	2/28/2011	NO	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/l)	n/a	n/a	2.0	2.0	2/28/2011	NO	Decay of natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l
RADIUM, (226 + 228) (pCi/l)	5	0	3.5	3.5	2/28/2011	NO	Erosion of natural deposits
COMBINED URANIUM (ug/l)	30	0	2.1	1.2-2.1	2/25/2008	NO	Erosion of natural deposits
GROSS ALPHA, INCL. R&U (n/a)	n/a	n/a	3.5	3.5	2/28/2011	NO	Erosion of natural deposits

Health Information

Please feel free to call our office if you have any questions. The Village of Cottage Grove's Water Utility works around the clock to provide each and every customer with the purest water. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.

Thank you,

The staff at the Cottage Grove Water Utility